## Antibiotic Resistance & Patient Safety Portal Inpatient Antibiotic Stewardship Data

2017

## **Data Methodology**

The Inpatient Antibiotic Stewardship section of the Antibiotic Resistance & Patient Safety Portal includes data on antibiotic stewardship practices as reported by U.S. acute care hospitals to CDC's National Healthcare Safety Network (NHSN). For more information about NHSN, including details on surveillance methodology, see http://www.cdc.gov/nhsn/about-nhsn/index.html.

## **Data Represented**

Healthcare facilities participating in NHSN complete an annual online survey, which includes questions on facility demographics, laboratory practices, infection control practices, and as of 2014, questions specific to antibiotic stewardship program (ASP) organizational structure, support, and activities. The survey is typically completed by a hospital's infection preventionist, however, hospital staff who complete ASP questions are encouraged by CDC to request assistance from "pharmacists and/or physicians who focus on infectious diseases, where available, and/or members of the facility's pharmacy and therapeutics committee."

The ASP portion of the 2017 annual survey is composed of eleven questions (#25 - #35). CDC uses responses to these questions to assess whether facilities meet criteria for each of the seven Core Elements of Hospital Antibiotic Stewardship Programs. Data displayed in the Inpatient Antibiotic Stewardship section of the Patient Safety Portal are aggregated at the state and national level.

## **Mapping of Survey Questions to Core Elements**

Survey question numbers below correspond to the 2017 NHSN Patient Safety Component Annual Hospital Survey.

- **1. Leadership Commitment:** Dedicating necessary human, financial, and IT resources.
  - **#25** Written statement of support
  - **#28** Salary support
- **2.** Accountability: Leader responsible for antibiotic stewardship program outcomes.
  - **#26** Pharmacist / Physician / Co-Led / Other
- **3. Drug Expertise:** Pharmacist leader responsible for working to improve antibiotic use.
  - **#27** At least one pharmacist responsible for improving antibiotic use
- **4. Action:** Performance of at least one prescribing improvement action.
  - **#29** Requirement to document antibiotic indication
  - **#30** Facility-specific treatment recommendations
  - **#31** Antibiotic time out
  - **#32** Prior-approval
  - **#33** Audit with feedback

- **5. Tracking:** Monitor prescribing and antibiotic resistance patterns.
  - **#29b** Document antibiotic indication and monitor adherence to indication documentation policy

**Core Elements of Hospital** 

**Antibiotic Stewardship Programs** 

1. Leadership Commitment

2. Accountability

3. Drug Expertise

4. Action

5. Tracking

6. Reporting

7. Education

- **#30b** Facility-specific treatment recommendations and monitor adherence to facility-specific treatment recommendations
- #34 Monitor antibiotic use (consumption)
- **6. Reporting:** Regularly report to staff prescribing and resistance patterns.
  - #33 Audit with feedback
  - **#34b** Reports on antibiotic use shared with prescribers
- **7. Education:** Clinicians educated on antibiotic resistance and improving prescribing practices.
  - **#35** Education provided to clinicians and other relevant staff on improving antibiotic use

